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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,949	09/15/2000	Ludovic Pierre	5266-03001	1679

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EXAMINER	
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ART UNIT	PAPER NUMBER
2611	3

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/662,949	PIERRE ET AL.	
	Examiner	Art Unit	
	Son P Huynh	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2000 and 17 May 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 September 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

1. Applicant has not given a complete post office address (zip code of inventor Ludovic Pierre is missing) anywhere in the application papers as required by 37 CFR 1.33(a), which was in effect at the time of filing of the oath or declaration. A statement over applicant's signature providing a complete post office address is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-7, 9,11-12, 15-17, 19-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Augenbraun et al. (US 5,797,001).

Regarding claim 1, Augenbraun teaches a method implemented in an interactive television system for storing a program for deferred playback, wherein the program has one or more data streams comprising a carousel of data objects (the data elements are

broadcast on a rotating basis as effected by scheduler 14 (col. 7, line 64 +) and wherein the data objects (data elements) are broadcast in the interactive television system (100 figure 1) as a first data stream, wherein the method comprises:

broadcasting the first data stream on a first channel (broadcasting data stream that carries data element/data attributes on a channel via output circuit 115 and communication port 116 on channel 121– col. 7, line 64+);

receiving the first data stream on the first channel (receiving the data element/data stream at user receiver 120 on channel 121 – Col 8, line 10+);

parsing the first data stream (using Data filter 122 or tuner 220 and demodulator 230 – figures 1-2 and col. 8, line 15+);

extracting the data objects from the first data stream (extracts the data element and data attribute information from the modulated signal – col. 9, line 16+);

storing a first set of the data objects from the first data stream on a storage device (storing a first set of the data element on storage device 123 – figures 1-2 and col. 9, line 32+);

storing properties associated with the first data stream or the data objects on a storage device (data elements to select are determined by processing the corresponding data attributes with algorithms stored within controller 124, and then selecting those data elements that meet pre-determined criteria as guided by the processing result (col. 8, line 20+. Necessarily, the property associated with the data objects is stored on a storage so that the data elements can be filter according to the properties).

Regarding claim 3, Augenbraun discloses when a data element is not presented in storage device 123 upon user selection; a message is displayed on screen informing the user of the next availability of that data element. If the user decides to wait for the selected data element to be displayed, the selected data element is received, extracted, stored in storage engine, and displayed when it arrives after a delay period (col. 15, line 6+ and figures 1-2). Necessarily, the method comprising:

broadcasting a second data stream containing one or more data objects (e.g. broadcasting data stream containing selected data elements on next broadcast cycle – col. 8, line 49+);

in response to detecting the data objects in the first data stream reference one or more of the data objects from the second data stream (detecting the selected data element that was not available in storage device 123 by the time the user selected and decided to wait- Col. 15, line 14+), extracting the one or more of the data objects from the second data stream (extracting the data elements – col. 9, line 16+); and

storing the one or more of the data objects from second data stream on a storage device (col. 15, line 25+).

Regarding claim 4, Augenbraun teaches broadcasting the properties in the first data stream, wherein the property is selected from data object identifier, reference of a data object (col. 8, lines 15-67; col. 12, line 21+).

Regarding claim 5, Augenbraun teaches a system comprising:

an interactive television receiver (tuner 220, demodulator 230, etc. figure 2) configured to received a "pushed data stream" (modulated signal) as part of a program, wherein the "pushed data stream" contains a plurality of data objects (modulated signal contains data element and data distribution information – col. 9, line 7+);
a storage device (123 – figure 2) coupled to the interactive television receiver (tuner 220, demodulator 230, etc. – figure 2);
wherein the interactive television receiver is configured extract the data objects from the "pushed data" (demodulator 230 extracts the data element and data attribute information from the modulated signal – col. 9, line 16+);
wherein the storage device is configured to store one or more of the data objects as a first stored data (col. 9, line 32+).

Regarding claim 6, Augenbraun teaches the first stored data includes one or more properties (e.g. reference, hyperlink, identifier, etc. col. 8, line 43+) corresponding to one or the data objects or the pushed data stream.

Regarding claim 7, Augenbraun teaches the properties are selected from data object identifier, reference to a data object (col. 8, line 43+).

Regarding claim 9, Augenbraun teaches a broadcast station (110 – figure 1) coupled to the interactive television receiver (figures 1-2), wherein the broadcast station is configured to transmit the "pushed data stream" to the interactive television receiver

(transmitter 100 broadcast data element/data attributes in a modulated signal to receiver 120 col. 7, line 64+).

Regarding claim 11, Augenbraun teaches the broadcast station is configured to transmit properties corresponding to the data objects (transmitter 110 transmits data attributes 112. One or more data attributes 112 may be associated with each corresponding data element – col. 7, line 45+).

Regarding claim 12, Augenbraun teaches a method comprising:
providing a "pushed data stream" as part of a program, wherein the "pushed data stream" includes one or more data objects (providing modulated signal which includes data element/data attribute information – col. 9, line 15+);
receiving the "pushed data stream" (receiving modulated signal at tuner 220 – figure 2 and col. 9, line 10+);
extracting the data objects from the "pushed data stream" (extracts the data element and data attribute information from the modulated signal – col. 9, line 16+);
storing the data objects on a storage device (storing data element/data attribute on storage device 123 – col. 9, line 32+).

Regarding claim 15, Augenbraun teaches storing one or more object properties (reference such as hyperlink, identifier, etc. col. 12, line 21+).

Regarding claim 16, Augenbraun teaches the properties are selected from data object identifier, reference to a data object (col. 8, line 43+).

Regarding claim 17, Augenbraun teaches providing the object properties in the "pushed data stream" (col. 12, line 21+).

Regarding claim 19, Augenbraun teaches the data objects are stored in a first file, and wherein the object properties of the data objects are stored in a second file (when the user selects a hyperlink or identifier associated with a hyperlink, if the data element is not present in storage device 123, a message is displayed informing the user of the availability of that data element in next broadcast cycle- col. 14, line 50+. Thus, the first file is met by the file in next broadcast cycle; the second file is met by the file, contains hyperlink, identifier, etc. that already stored in receiver 120).

Regarding claim 20, Augenbraun teaches storing is in response to detecting a cached request for information contained in the "pushed data stream" (storing in response to user preferences, interest group, interest level, etc. – col. 11, line 6+).

Regarding claim 21, Augenbraun teaches fetching a first data object from the storage device, in response to detecting a reference to the first data object in the pushed data stream, wherein the detecting occurs while the pushed data stream is played "live" (fetching selected data element from storage device 123, in response to detecting a

reference, such as hyperlink, identifier, etc. to the data stream in the modulated signal, wherein the detecting occurs while the modulated signal is played from the storage – col. 14, line 37+).

Regarding claim 22, Augenbraun discloses user selects a hyperlink or reference to display a data element. If the data element is not present in storage device 123 upon user selection, a message is displayed informing the user of the next availability of that data element. the storage engine is activated to store the desired data element when it arrives. If the user decide to wait for the desired data stream, when the data element arrives, it is received by tuner 220, extracted by demodulator 230, stored on storage engine, and displayed to user (col. 9, lines 8-43; col. 15, line 6+). Necessarily, the method comprising:

detecting a reference in the pushed data stream to an external data object (detecting a reference in the modulated signal is present in storage device upon selection);

wherein the external data object is contained in a data stream that is not contained in the pushed data stream (data element, which is not present on storage device upon selection, is broadcast in next broadcast cycle);

selecting a data stream containing the external data object (selecting the desired data element in the next broadcast cycle – col. 15, line 25);

extracting the external data object from the data stream (extracting the desired data element from data stream of next broadcast cycle); and

storing the external data object on the storage device (storing the desired data element on storage device).

Regarding claim 23, Augenbraun disclose the data element comprises pages on tennis and pages on stock quotes (col. 13, line 62+). Augenbraun further discloses if the data element is not present in storage device upon user selection, a message is displayed informing the user of the next availability of that data element. The storage engine is activated to store the desired data element when it arrives (col. 15, line 5+). Necessarily, the method comprising detecting a live data object (e.g. stock quotes) in "pushed data stream" (data stream in next broadcast cycle) and storing a reference (e.g. hyperlink, identifier, etc.) to the live data object on the storage device (storage engine).

Regarding claim 24, Augenbraun teaches the reference to the live data object is stored as an object property on the storage device (used to identify the data object – col. 12, line 16+).

Regarding claim 25, Augenbraun teaches playing back the program from the storage device (playing back data element such as video clips, animation, etc. from the storage device – col. 14, line 37+).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Augenbraun et al. (US 5,797,001).

Regarding claim 2, Augenbraun discloses a method as discussed in the rejection of claim 1. Augenbraun further teaches the data objects (data elements) in the first set of data objects are "non-live data objects" (elements data are stored in storage device 123 and displayed later – col. 14, line 58+), the data elements comprises live data object (e.g. stock quotes, data element is not present in storage upon user selection – col. 13, line 60+); storing references to the live data objects on a storage device (e.g. guide data, hyperlink, identifier, col. 8, line 41+). However, Augenbraun does not specifically disclose inhibiting storage of a second set of the data object. Official Notice is taken that displaying live data without storing it is well known the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Augenbraun with the well know teaching in the art in order to provide most accurate data to viewer.

Regarding claim 8, Augenbraun discloses a system as discussed in the rejection of claim 5. Augenbraun further teaches storing reference of live data objects (e.g. hyperlink, identifier of data elements such as stock quotes, col. 12, line 21+). However, Augenbraun does not specifically disclose not storing live data object. Official Notice is taken that providing live data object without storing it is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Augenbraun to use the well-known teaching in the art in order to reduce delay time.

6. Claims 10, 13, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Augenbraun et al. (US 5,797,001) and in view of Chernock et al. (US 6,177,930 B1).

Regarding claim 10, Augenbraun teaches a system as discussed in the rejection of claim 5. However, Augenbraun does not specifically disclose broadcast station transmits a file table corresponding to the program.

Chernock teaches broadcast station transmits (headend server 10 and transmitter 16 – figure 1) transmits a file table corresponding to the program (directory 24 – figure 2 and col. 3, line 56+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Augenbraun to use the teaching as taught by Chernock in order to allow user to locate the data easily.

Regarding claim 13, Augenbraun teaches a method as discussed in the rejection of claim 12. However, Augenbraun does not specifically disclose providing a file table.

Chernock teaches providing a file table with the "pushed data stream" (providing directory 24 or navigation data table 34 with carousel in data stream– figures 2, 4 and col. 3, line 56+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Augenbraun to use the teaching as taught by Chernock in order to allow user to locate the data easily.

Regarding claim 14, Augenbraun teaches a method as discussed in the rejection of claim 12. However, Augenbraun does not specifically disclose storing a file table with the data object.

Chernock teaches storing a file table with the data object (in memory 60- figure 5 and col. 5, line 44+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Augenbraun to use the teaching as taught by Chernock in order to allow user to locate the data easily.

Regarding claim 18, Augenbraun teaches a method as discussed in the rejection of claim 15. Augenbraun further teaches data objects and object properties are stored in a first file (file contain data element/attribute element - col. 12, line 21). However,

Augenbraun does not specifically disclose object properties of the data objects are stored in the header of the file.

Chernock teaches object properties of the data objects are stored in the header of the file (identity of each image frame, and its position of the image, etc. are stored in the directory or navigation data table 34 of each carousel or each frame – figures 2-4 and col. 3, line 55+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Augenbraun to use the teaching as taught by Chernock in order to allow the content of the file to be recognized easily.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ellis et al. (US 2003/0149988 A1) teaches client server based interactive television program guide system with remote server recording.

Hirose (US 5,926,821) teaches file control method and system for allocating a free block to a file when the previously allocated block is to be written to.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P Huynh whose telephone number is 703-305-1889. The examiner can normally be reached on 8:00-5:30.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son P. Huynh
July 9, 2004

VIVEK SRIVASTAVA
PRIMARY EXAMINER